



The direction of travel is shown at the left margin of the graphic to provide orientation. The above example shows westbound SR 520. Cross-streets denoted across the bottom of the chart represent approximate locations where traffic operates at given speeds. Speeds are denoted by different colors as shown in the legend, with the darker colors representing slower speeds.

Time intervals along the right side are broken into 15-minute intervals. Bottlenecks are identified in the chart by locations where the colors get darker and wider. When darker colors take up more space, it is an indication that traffic operates at slower speeds for a long duration. As the darker colors extend horizontally across more locations, it indicates that the congestion extends for longer distances.

The example chart illustrates various bottleneck locations. It also illustrates the range of congestion duration that can occur. In the above chart, a vehicle's travel path through time and space could be plotted with a line from the right to the left (left-to-right for eastbound SR 520) of the chart. For example, if a vehicle entered the SR520 corridor at the Avondale/SR202 merge point at about 4:30 PM, it would travel at free-flow speed up to the I-405 interchange area, and then the travel speed would rapidly decrease to about 30 mph. Travel speeds would continue to slow to 0 to 10 mph through the 108th Ave NE and Bellevue Way interchanges, and then speed up to about 30 mph until 92nd Ave NE, where again travel would slow to stop-and-go speeds. After the 84th Ave NE on-ramp, speeds would pick up to about 30 mph at the bridge. Once on the bridge, speeds would increase to between 40 to 50 mph. Just after the Montlake off-ramp, speeds would be free-flow for a short length until they would slow again due to congestion at the Montlake on-ramp, where speeds would drop to 30 mph. A rough estimate of the trip travel time shows that it would require approximately 25 minutes to complete.

Figure 4
Speed and Location Example Chart